

WHAT IS CLAIMED IS:

1. A lens barrel mechanism comprising:
a first optical unit;
a second optical unit; and
5 a bellows-shaped unit for performing light
blocking and dust proof, said bellows-shaped unit
being disposed between said first optical unit and
said second optical unit so as to be expanded and
contracted interlocking with relative movement in an
10 optical axial direction between said first optical
unit and said second optical unit;
wherein one end of said bellows-shaped unit is
fixed to said first optical unit, and the other end
of said bellows-shaped unit is mounted to said second
15 optical unit such that the other end of said bellows-
shaped unit can be moved in the optical axial
direction relative to said second optical unit, and
the other end of said bellows-shaped unit can be
regulated by different regulating portions of said
20 second optical unit between cases where said bellows-
shaped unit is contracted and where said bellows-
shaped unit is expanded.

2. A lens barrel mechanism according to claim 1,
25 wherein said second optical unit includes a cam pin
which moves in the optical axial direction in
engagement with and guided by a cam and a guide

groove provided in an outer cylinder, and said
different regulating portions one of which extends
toward an inner circumferential side of said second
optical unit, and the other of which is a portion of
5 said cam pin protruding toward the inner
circumferential side of said second optical unit.

3. A lens barrel mechanism according to claim 1,
wherein said first optical unit and said second
10 optical unit are moved relative to each other in the
optical axial direction when a focal length is
changed, in the event that a condition is changed
from a condition under which said first optical unit
and said second optical unit are both contained in an
15 outer cylinder to a condition under which the focal
length is set to a wide-angle side, said first
optical unit is moved rearward in the outer cylinder
from a position of said contained condition to a
position whereat the other end of said bellows-shaped
20 unit impinges said regulating portion which is a
portion of a cam pin protruding toward an inner
circumferential side of said second optical unit,
while said second optical unit is moved forward
relative to the outer cylinder, and in the event that
25 the focal length is set to a telephoto side, said
second optical unit remains at the forward moved
position, while said first optical unit is moved

forward to a position whereat the other end of said
bellows-shaped member impinges said regulating
portion which is a portion which extends toward the
inner circumferential side of said second optical
5 unit.

4. A camera characterized by a lens barrel
mechanism recited in claim 1.

10 5. A lens barrel mechanism characterized in
that a bellows-shaped unit for performing light
blocking and dust proof is disposed between a first
unit and a second unit which are movable relative to
each other in an optical axial direction of a lens
15 barrel, a first portion of said bellows-shaped unit
is fixed to said first unit, a second portion of said
bellows-shaped unit is mounted to said second unit
such that said second portion can be moved in the
optical axial direction relative to said second unit,
20 and said second portion of said bellows-shaped unit
can be regulated in the optical axial direction by
different portions of said second unit between cases
where said bellows-shaped unit is contracted and
where said bellows-shaped unit is expanded,
25 interlocking with the relative movement in the
optical axial direction of said first unit and said
second unit.

6. A lens barrel mechanism according to claim 5,
wherein said second unit is an optical unit provided
at a front end of said lens barrel, said regulating
portion at the time of expansion is a portion of a
5 cam pin protruding toward an inner circumferential
side, and said cam pin supports and guides said
optical unit in the optical axial direction.